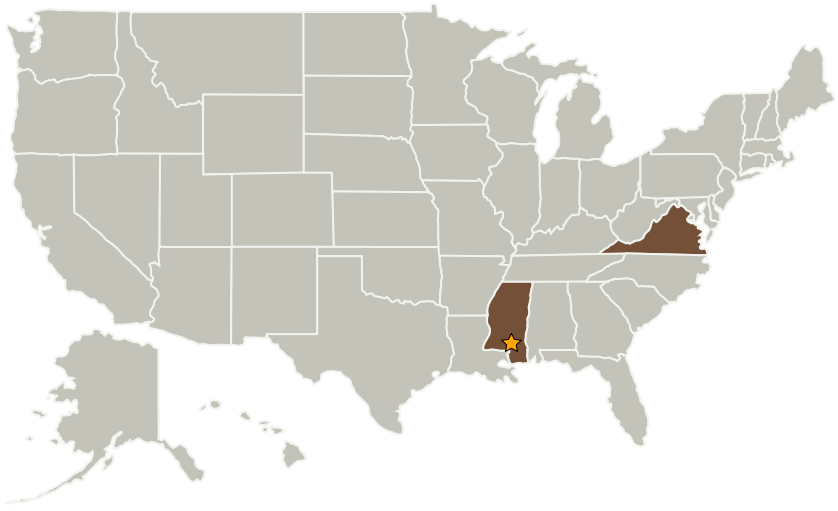
Rule-Based Integration of Science Data for Analysis and Display (RISDAD), Phase I

Completed Technology Project (2007 - 2007)

Project Introduction

In order to facilitate wider understanding and use of NASA and other scientific data sources through publicly available and familiar tools, such as the Google Maps, Payload Systems Inc. proposes to develop a flexible scientific data search, analysis and visual presentation tool suite. This suite will use a modular plug-in approach to retrieve and translate information from user-selected networked data sources into semantic-web representations and then apply rule-based processing to integrate the translated content with geospatial display tools, such as Google Maps and Google Earth, and with sources of domain expert commentary about the displayed information. Our Phase I effort will analyze data retrieval, processing and display architectural approaches, such as web browser plug-in applications versus server centric approaches, and select the best for this type of application. Phase I will prototype key elements, such as data retrieval and rule-processing, to assess the performance and feasibility of the selected approach and create a preliminary design. Our Phase II effort will then advance the design and provide a polished implementation of the tool suite.

Primary U.S. Work Locations and Key Partners



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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Stennis Space Center (SSC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Organizations Performing Work	Role	Type	Location
★Stennis Space Center(SSC)	Lead Organization	NASA Center	Stennis Space Center, Mississippi
Aurora Flight Sciences Corporation	Supporting Organization	Industry	Cambridge, Massachusetts

Primary U.S. Work Locations	
Mississippi	Virginia

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Technology Areas

Primary:

- TX11 Software, Modeling, Simulation, and Information Processing
  - TX11.4 Information Processing
    - TX11.4.2 Intelligent Data Understanding